

A system and method for storing data, the system having one or more storage devices, caches data from a sender into a first random-access structure located in a first cache level, caches data from the first cache level into a log structure located in a second cache level, and stores data from CL into a second random-access structure located in a storage level, wherein CL is the first cache level or the second cache level. In further embodiments of the invention, the second cache level caches in the log structure parity data for the data cached in the log structure. In a still further embodiment of the invention, the storage level stores in the second random-access structure parity data for the data stored in the second random-access structure.